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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,777

10/04/2007

Matthew Trevor Snowden

Stolt-57

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7590

11/09/2010

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EXAMINER

ANDRISH, SEAN D

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,777	Applicant(s) SNOWDON ET AL.	
	Examiner SEAN D. ANDRISH	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 13 and 15 - 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 13 and 15 - 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1 - 9, 11 - 13, and 15 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis (5,975,802) in view of Martin et al. (5,971,666).

Regarding claim 1, Willis discloses an apparatus comprising: a tensioner (19); a tiltable structure (ramp 16), said structure tiltable between a upright and horizontal states; the apparatus is operable in a first mode (solid-lined figure illustrated in Fig. 9) and in a second mode (dashed-lined figure illustrated in Fig. 9) (Fig. 9; column 3, lines 4 - 22; column 6, lines 20 - 21). Examiner refers applicant to column 3, lines 4 - 6 and line 16) of Willis, which teaches bending a pipeline; if a pipeline can be bent, it is inherently flexible. Willis fails to disclose the apparatus in the second mode receiving flexible elongate product from the tensioner along said axis and diverting it to a more vertical angle. Martin teaches a pipe laying vessel including a pipeline assembly apparatus

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arranged in a substantially horizontal orientation along the deck, the apparatus including a wheel (104) receiving the flexible pipe from the assembly apparatus and diverting it to a more vertical angle for departure from the vessel (Figs. 9 and 10; abstract; column 1, line 65 - column 2, line 6; column 9, lines 8 - 18) to allow the pipeline to be plastically bent to a desired launch angle. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus as disclosed by Willis with the pipeline diverter as taught by Martin to plastically bend a pipeline from a substantially horizontal orientation to a desired launch angle.

Regarding claims 2, 3, and 17, Willis further discloses a radius controller (17, 57) and a straightener (60), said radius controller and straightener are provided at least partially in the form of removable modules (Fig. 9; column 3, line 4; column 6, lines 10 - 14).

Regarding claims 4 and 5, Willis discloses all of the claim limitation(s) except for an overboarding sheave. Martin teaches a pipeline laying apparatus including an overboarding sheave (wheel 104) (Figs. 9 and 10). It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus as disclosed by Willis with the overboarding sheave as taught by Martin to plastically bend a pipeline from a substantially horizontal orientation to a desired launch angle.

Regarding claim 6, Willis further discloses the tiltable structure (ramp 16) is operable in the first mode to orient the tensioning means (19) vertically and at a range of angles below vertical (Fig. 9; column 5, lines 57 - 60).

Regarding claim 7, Willis further discloses wherein in said second mode the tensioner (29) is detached from and supported independently of the tiltable structure (16), the tiltable structure (16) being returned to an upright orientation for supporting loads independently of said tensioner (29) (Fig. 9; column 4, lines 26 - 28).

Regarding claim 8, Willis further discloses the tiltable structure (16) can be operated in the second mode at a range of angles either side of vertical (Fig. 1). Examiner notes that the pipe laying zone (12) of the tiltable structure is positioned on the ship-facing side of vertical (vertical is defined as the vertical plane that runs through the pivot point about which the fixed clamp 20 rotates as shown in Fig. 1) and the pipe section attached to the bottom end of the pipe laying zone (12) is positioned on the seaward side of vertical. The seaward side of the tiltable structure is located on the opposite side of vertical with respect to the ship-facing side of the tiltable structure. Examiner also notes that Martin teaches a range of angles either side of vertical (Figs. 1 and 2) to plastically bend a pipeline from a substantially horizontal orientation to a desired launch angle.

Regarding claims 9 and 18, Willis further discloses the tensioner (19) in the second mode is located at a position displaced horizontally from a location from which it will be elevated by said tiltable structure in the first mode (Fig. 1).

Regarding claim 11, Willis further discloses wherein the tiltable structure (16) is movable to provide said horizontal displacement of the tensioner (19) (Fig. 1).

Regarding claim 12, Willis further discloses the tiltable structure (16) is connected to the vessel by one or more pivotable arms (stays 54) (Fig. 10; column 5, line 64 - column 6, line 2).

Regarding claim 13, Willis further discloses a dual hydraulic system (hydraulic rams 53) (Fig. 10; column 5, lines 53 - 60).

Regarding claim 15, Willis discloses a method as discussed above and further discloses detaching certain operating equipment (wire 50) from the structure (column 6, lines 57 - 58).

Regarding claim 16, Willis further discloses the operating equipment (wire 50) is provided as a module which can be removed and relocated with respect to the structure (column 6, lines 57 - 58; column 7, lines 13 - 15).

Regarding claim 19, Willis further discloses wherein said operating equipment includes overboarding means (roller box 63), which is detached from said tiltable structure in the first mode (Fig. 10). Fig. 10 illustrates the roller box (63) is attached to an unlabeled element (unlabeled rectangular structure) and said unlabeled element is attached to the ramp (16). Examiner interprets the claim limitation "detached from" as meaning that the overboarding means is not directly attached to the tiltable structure and, given this interpretation, Fig. 10 of Willis illustrates the overboarding means (63) is detached from the tiltable structure (16) as best understood by the examiner. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the roller box as disclosed by Willis with the sheave (wheel 104) and tensioners (172, 174) (Figs. 9 and 10; column 1, line 65 - column 2, line 6) to plastically bend a pipeline from a substantially horizontal orientation to a desired launch angle.

Regarding claim 20, Willis further discloses said operating equipment includes the tensioner (29), which is detached from and supported independently of said tiltable structure (16) in said second mode (Fig. 9; column 4, lines 26 - 28).

Regarding claim 21, Willis further discloses the tensioning means (19) gripping and paying out the flexible pipeline (15) while supported on said tiltable structure (16) at an angle aligned with the angle of departure of the pipeline (15) from the vessel (Fig. 1).

Regarding claim 22, Willis further discloses the tensioning means (19) gripping and paying out the flexible pipeline (15) along said substantially horizontal axis, the pipeline (15) being diverted by said apparatus from said horizontal axis to the angle of departure of the pipeline (15) from the vessel (Fig. 9; column 3, lines 4 - 12 and lines 22 - 27; column 6, lines 20 - 21; claim 16).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willis in view of Martin et al. as applied to claim 1 above, and further in view of Stockstill (6,554,538). Willis in view of Martin discloses all of the limitations of the above claim(s) except for a pair of legs pivoted to the deck of the vessel at their lower ends and joined by a crossbeam at their upper ends, the tensioner in the first mode being carried between the legs below the crossbeam, with a straightener and radius controller mounted above the crossbeam and being detachable when adapting the apparatus into the second mode. Stockstill teaches an apparatus comprising: a pair of legs (legs of tilting tower 19 located between welding station 26 and hull 11) pivoted to the deck (hull 11) of the vessel at their lower ends and joined by a crossbeam (welding station 26) at their upper ends, the tensioner (23) in the first mode being carried between the legs below the crossbeam (26), with a straightener (22) and radius controller (bend controller 21)

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mounted above the crossbeam and being detachable when adapting the apparatus into the second mode (Figs. 1, 1A, and 3; column 8, lines 64 - 67; column 9, lines 20 - 37; column 10, line 4) to enable a pipeline to be welded and then wound upon either of two reels and to be unwound from either of the two reels for launching to the sea bed via the tower. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus as disclosed above with the legs and crossbeam structure as taught by Stockstill to enable a pipeline to be welded and then wound upon either of two reels and to be unwound from either of the two reels for launching to the sea bed via the tower.

Response to Arguments

5. Applicant's arguments with respect to claims 1 - 13 and 15 - 22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN D. ANDRISH whose telephone number is (571)270-3098. The examiner can normally be reached on Mon - Fri, 7:30am - 5:00pm, Alternate Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

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SDA
10/26/2010